Clinical Pharmacists and Patient Care

TO THE EDITOR: Concerns for the future development and promotion of the rational use of therapeutic agents have been raised as the impact of the current and projected shortage of clinical pharmacologists and trends in the medical school curriculum were recently assessed.[1-3] Since it appears unlikely that the need for physician specialists with interest and expertise in the clinical investigation of drugs, adverse drug reaction surveillance, drug information analysis and the teaching of the principles of rational drug therapy can be met in the near future, it has been suggested that a clinical pharmacist perhaps can effectively provide the expertise and involvement in many of these areas.[4] The evolution of pharmacy education from a predominantly physical science and product-oriented curriculum toward clinical pharmacy,[5] with emphasis on the application of drug therapy knowledge, has significant implications for broadening the scope of pharmacy practice in the future. There is now emerging a new generation of clinically trained pharmacists capable of assuming more responsible and decisive roles as drug therapy specialists and able to transform their knowledge of therapeutics into significant contributions which directly influence patient care.[6]

Recently at the San Francisco General Hospital's Alcohol and Drug Detoxification Units, collaborative efforts were initiated by practitioners of medicine and pharmacy to explore and deal with the complex and formidable problems associated with the task of providing optimal drug utilization and therapeutic practice. To date the results have been most encouraging and productive as a clinical pharmacologist, pharmacist, neurologist, rheumatologist, residents, interns, medical and pharmacy students participate together in a variety of patient care, teaching and research activities. There are compelling reasons[7] why it would be extremely desirable that a pharmacist knowledgeable in the pharmacology, pharmacokinetic and biopharmaceutic properties of drugs and their clinical use be included in collaborative efforts with pharmacologists and physicians to promote the safe and rational use of drugs. It has been suggested that the expansion of the pharmacist's role beyond those associated with distributive functions to include activities such as providing primary or chronic health care maintenance is in the interest of meeting the demands of our health care delivery system for more effective use of professional resources. With clinical pharmacologists and physicians, the clinical pharmacist can effectively broaden the scope of efforts to promote rational drug therapy practice beyond the academic and research center into the community where the need for more efficient utilization of drug therapy is most immediate and critical.

As new directions are being charted in the health professions to meet the demands of our health care delivery system, more functional and realistic definitions of individual responsibilities and roles involving patient care will need to be considered by practitioners of medicine and pharmacy. Whether these newly defined responsibilities and roles are successfully implemented will depend upon the willingness of pharmacologists, physicians and pharmacists to work together on their development now.

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Dextroamphetamine Therapy in Hyperactive Children

TO THE EDITOR: As the authors pointed out in the summary of their article [Greenberg LM, McMahon SA, Deem SA: Side effects of dextroamphetamine therapy in hyperactive children. West J Med 120:105-109, Feb 1974], there is indeed a profound influence upon personality organization which the dextroamphetamines may produce. Perhaps the point should have been made a little more strongly, however, that merely because a child is "hyperactive," this, per se, is no indication for the use of stimulant medication and in the cases in which they reported undesirable side effects, clinically it would appear that perhaps these were not the best candidates to have begun on stimulant therapy.

Perhaps of even more importance, however, it

should be noted that the side effects as reported are those that are seen quite commonly in what can be construed as high doses of Dexedrine® which these authors were using. The overwhelming majority of children in whom amphetamines are indicated will be responsive to doses in the neighborhood of 5 to 15 mg, given only once daily, and it is hardly surprising to see the type of effect that they note when they were using 10 to 20 mg, twice daily. Unfortunately, it is side effects of this nature which have given many lay people such a bad impression of medication for what is such a common problem; namely, these normally preventable side effects which may be related to injudicious prescription of improper compounds but more particularly to injudicious use of excessive doses.

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Informed Consent

TO THE EDITOR: As a physician performing frequent cerebral arteriography and facing this issue, I am compelled to comment in response to Dr. Rosenberg's excellent article on informed consent. [Rosenberg SH: Informed consent—A reappraisal of patients' reactions (Medical Jurisprudence). Calif Med 119:64-68, Nov 1973].

There seems to me to be an assumption on the author's part that *medically* the cerebral arteriogram is in the patient's best interest—with which I concur. And the further assumption that *medically* the risks of the procedure are outweighed by the benefits. I agree with the second assumption as well. However, despite the available percentages, I believe that once the *probabilities* of such complications are made clear to the patient, the weighing of risks should be the patient's judgment, for *he* is the one to bear the consequences.

In other words, I believe that patients should retain the right to "abuse" themselves and refuse to undergo procedures in which they do not feel the risk outweighs the benefit *to them.*

Conversely, I think the physician is arrogant and short-sighted when he resents the patient's refusal on informed consent. The patient's *medical* best interest should not be confused with his *general* best interest. That decision is beyond medicine and the physician. It is highly subjective and ultimately must rest with the patient only.

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Acupuncture

TO THE EDITOR: The article [Lewin AJ: Acupuncture and its role in modern medicine. West J Med 120:27-32, Jan 1974] by Dr. Andrew Lewin on acupuncture seems to depart from that scientific objectivity which is supposed to be the basis for modern medicine. Since when does an article from the "New Chinese News Agency" provide the type of documentation we need for a rational approach to medicine?

When the author makes a statement such as "a large proportion of surgical morbidity is due to complications of anesthesia, rather than to the procedures themselves," this reader is inclined to look with scepticism at the rest of his thesis.

If he really wants to promote the investigation of the mechanisms and uses of acupuncture, Dr. Lewin would do well to use only a reliable bibliography and to refrain from the use of irrational statements as to the need for this investigation.

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The Author Replies

I agree with Dr. Reuben J. Balzer's contention that the New China News Agency, as well as several others of the references cited, cannot be considered incontrovertible scientific sources. However, at the time the article was written reliable bibliographic material was not available. For this reason, I was very careful to state that the validity of the material and the reliability of the sources were definitely in question. In the last year under the auspices of the National Institutes of Health as well as many private organizations, research has begun on the efficacy and pathophysiologic mechanisms of acupuncture. Future articles will no doubt be able to rely on more definitive sources.

There is no point in arguing about the quantitative contribution of anesthesia to operative morbidity and mortality since data collection and interpretation of this problem are subject to multiple errors and biases. The basic point I was trying to make was that by avoiding general anesthesia in poor risk patients, a reduction in morbidity and mortality should be able to be achieved.

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